Don't Idle Your Profits Away!

Each year, idling long-haul trucks consume ~ 838 million gallons of diesel fuel in the U.S. Using auxiliary devices can reduce fuel costs by ~ $1,500 and maintenance costs by ~ $275 *per truck* annually, without sacrificing comfort or convenience.

These auxiliary devices . . .

Alternatives to Idling

- Cab and Block Heaters
- Auxiliary Power Units
- Thermal Storage Systems (heating and air conditioning)

Cut Costs

Provide $1.3 billion in annual fuel savings (at $1.75/gal diesel fuel)

Lower Operating Costs

- Less Diesel Fuel Burned
- Less Frequent Oil Changes
- More Miles Before Overhaul

Save the Environment

Assuming 1,830 hours of idling a year, a single truck emits:

- 21 tons of carbon dioxide, a greenhouse gas;
- 390 pounds of carbon monoxide; and
- 1,024 pounds of nitrogen oxides.

Idling alternatives dramatically reduce these emissions.

Offer Other Advantages

- Boost Efficiency
- Reduce Engine Wear
- Ready Availability
- Shorten Payback Time

Provide National Benefits

If all Class 7 and 8 long-haul trucks (trucking more than 500 miles/day)—about 458,000 vehicles—used these devices, total fuel savings would equal up to 0.5% of all fuel used for U.S. transportation.

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Office of Heavy Vehicle Technologies

www.trucks.doe.gov

Calculate Your Idling Costs

(Based on Maintenance Council Report RP1108, issued March 1995, and Argonne National Laboratory Report, September

Instructions: In each row, start at the left and fill in the blanks with information about your equipment and costs. Then multiply or divide as shown. Some answers are used again. Where you see an arrow, copy the answer into the blank at the end of the arrow, so you can use it in the next step.

1 How many hours each year could you use auxiliary devices instead of idling? ____ hours/year x How much fuel is used for idling? Look up the number in the table below. ____ gallons/hour x What is the price of diesel fuel? $ ____ /gallon = **Fuel Costs** $ ____ /year +

2 ____ hours/year x ____ gallons/hour x What is your average fuel economy? ____ miles/gallon = "Miles of idling" (idling is like putting miles on your engine) ____ miles/year

3 How much does an oil change cost? $ ____ /oil chg. ÷ How many miles between oil changes? ____ miles/oil chg. = $ ____ /mile x "Miles of idling" ____ miles/year = **Preventive Maintenance Costs** $ ____ /year +

4 How much does an engine overhaul cost? $ ____ /overhaul ÷ How many miles between overhauls? ____ miles/overhaul = $ ____ /mile x "Miles of idling" ____ miles/year = **Overhaul Costs** $ ____ /year =

5 **Total Costs for Idling** (add right-hand column) = **Total Costs** $ ____ /year

How much fuel is used for idling (gallons/hour)?

Locate your engine RPM and parasitic brake horsepower (BHP) at idle. The corresponding number is about how much fuel you use to idle. For example, 1000 RPM at a BHP of 10 consumes about 1.2 gallons of fuel an hour. Typical accessories require between 10 and 20 BHP.

RPM	Brake Horsepower of Accessories				
	0	5	10	20	30
800	0.6	0.7	1.0	1.4	1.7
1000	0.75	1.0	1.2	1.55	2.0
1200	1.0	1.2	1.5	1.8	2.25